#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015122 Address: 333 Burma Road **Date Inspected:** 19-Jun-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Mr.Zhong Chen/Li yan hua No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

#### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Nagalingam Pandaram Pillai was present during the times noted above for observations relative to the work being performed.

In process Inspection

Out Side

This QA Inspector observed the following work in progress:

SMAW in the 3F position for the OBG Segment 11DE, weld No. SSD23-PP106.5-008. The welder is identified as #204339. ZPMC QC is identified as Mr. Tang ya jun. The welding variables recorded by QC appear to comply with WPS-B-P-2113-FCM-1.

This QA Inspector observed the following work in progress:

SMAW in the 4G position for the OBG Segment 11DE, weld No. SEG072D-118. The welder is identified as #054013. ZPMC QC is identified as Mr. Tang ya jun. The welding variables recorded by QC appear to comply with WPS-B-P-2214-Tc-U4b-FCM.

This QA Inspector observed the following work in progress:

SMAW in the 4F position for the OBG Segment 11DW, weld No. SSD11A-PP105-203/204. The welder is identified as #067571. ZPMC QC is identified as Mr. Li ping. The welding variables recorded by QC appear to comply with WPS-B-P-2114-FCM-1.

This QA Inspector observed the following work in progress:

### WELDING INSPECTION REPORT

(Continued Page 2 of 3)

SMAW in the 4G position for the OBG Segment 11DE, weld No. SSD16A-PP104-253. The welder is identified as #054013. ZPMC QC is identified as Mr. Tang ya jun. The welding variables recorded by QC appear to comply with WPS-B-P-2214-TC-U4b-FCM-1.

Bay #14

This QA Inspector observed the following work in progress:

SAW in the 1G position for the OBG Segment 13AE bottom Plate, weld No. BP3033-001-002. The welder is identified as #044771. ZPMC QC is identified as Mr. Guo xing Hui. The welding variables recorded by QC appear to comply with WPS-B-T-2221-B-U3c-S-2.

Magnetic Particle Testing:-

Bay #19

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated an MT report for this date. The member is identified as Suspender Brackets.

The weld designation reviewed is as follows:

SB013-064-006,026,032,061,018,001,004,005,007,008. SB013-066-026,032,037,043,055,067,011,004,005,007.

During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on Suspender Bracket SB013 this Quality Assurance Inspector (QA) discovered the following issue:

- One (1) Linear Indication in the weld toe measuring approximately 45mm length.
- The weld is identified as SB013-066-025.
- -The weld is designated as Non Seismic Performance Critical Member (Non SPCM).
- -The weld is located on Suspender Bracket Stiffener SB013.
- -The indications are clearly marked on the material near the weld.
- -The weld is a complete joint penetration (CJP).
- -The Suspender Bracket is located in Bay# 19.

The Notice of Witness Inspection Number (NWIT) is 006012. The indication is located Within area previously tested and accepted by ZPMC Quality Control (QC) personnel.

For further information, please see the attached pictures below.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)





## **Summary of Conversations:**

The incident report is issued for the above mentioned discrepancy observed in Bay#19 and prior to issue it was informed to ZPMC QC and ABF QA.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Pillai,Pandaram	Quality Assurance Inspector
Reviewed By:	McClendon, Timothy	QA Reviewer